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FAMINE EARLY WARNING SYSTEMS NETWORK TECHNOLOGY SUPPORT CONTRACT (FEWS NET TSC)

CONFERENCE POLLING: WHITE PAPER

FEBRUARY 3, 2012

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Introduction

For the FEWSNET global conference, the FEWSNET team is looking for new ways to engage with participants to get feedback on conference meetings, presentations, and activities. One way to do so is via the application of polling technology.

The process would involve the development of a series of questions that could be used to poll participants either during or after events. For example, during an event, a presenter could project a question up on the screen and guide participants to answer by submitting a text to a specific number or by voting online at a specific internet address. One nice feature of this type of polling is that participants would not need to be pre-identified, as anyone with the number or URL could respond. Polling could also be used after an event. The FEWSNET team could use the polling tool to send out a text message or email to all participants soliciting their feedback. In this case, participants would need to be pre-identified so that conference managers could 'push out' the request to respond. To do so, FEWSNET would need to collect phone numbers and/or email addresses.

This document first briefly describes some of the common polling software available in the market. Next, it examines the different challenges posed by implementing SMS polling vs. online polling, including a discussion of the tradeoffs. The document concludes with a recommendation on how to move forward.

Overview of Software Reviewed

There is a plethora of polling software out on the market. To narrow down the search, we reviewed the top three tools that came up most often in web searches: Poll Everywhere, SMS Texting, and EZ Texting. We also reviewed two additional tools brought to us by FEWSNET partners: Trumpia and Twilio. These latter two tools are more of an open source platform that allows developers to create specialized features. Since the out-of-the box software serves FEWSNET needs, we only did a cursory review of Trumpia and Twilio. Table 1 provides an overview of each tool's features. The table shows the features currently available, those that can be made to work with additional programming, and those not currently available.

- Available ✓
- Not Available. X
- Available with additional programming --

There are really only two tools that are competitive right out of the box: Poll Everywhere and SMS Text. Since FEWSNET is looking at a simple and inexpensive way to engage respondents, we concentrated on these two tools. Both tools allow voting via SMS and online. Both allow for real-time presentation of results (e.g. in a power-point or blog). This feature is particularly useful as a crowd energizer in that you can see the poll change as respondents send in their texts. In addition, both tools offer advanced reporting features and the ability to provide key word customization (e.g. rather than type in a code like '33245' you can type in 'Green'). Furthermore, they are the only two that advertise the ability to work

internationally.[1] Poll Everywhere has two additional features that make it a more attractive option than SMS Poll. First, Poll Everywhere allows both multiple choice polls (e.g. choose a, b, or c) or free text polls (e.g. respondent can text whatever open-ended phrase she chooses). In contrast, SMS Poll only allows multiple choice polls. The other attractive feature of Poll Everywhere is that it has a quality assurance (QA) feature which allows someone to review responses before they are posted. In the event a presenter uses free text, this feature can prevent offensive responses from appearing on the screen. Given these features, we see Poll Everywhere as the most viable short term solution for the FEWSNET conference.

In the course of reviewing the software and in thinking about the process FEWSNET might use to integrate conference polling into the global meeting, we uncovered several challenges to the use of SMS and online polling. These issues and possible solutions are discussed in the following sections.

[1] Both companies provide international numbers (either UK or Australia) when operating outside the United States. However, neither company could guarantee that they would work with all phones and phone plans. See section SMS Polling for more details.

Table 1: Snapshot of Software Features

Product Name	Cost*	Polling Channels	Online voting	Real-time results projected on screen	Open-ended txt response	Adv. Rptg	Publish to blog page	Key word Response customizt.	QA review before posting	Int'l
Poll Everywhere www.polleverywhere.com	**$65**	SMS text Twitter web	✓	✓	✓	✓	✓	✓	✓	✓
SMS Poll www.smspoll.net	**$60**	SMS Web	✓	✓	X	✓	✓	✓	X	✓
Trumpia www.trumpia.com	**$50**	SMS	--	--	--	--	--	✓	X	X
Ez Texting www.clubtexting.com	**$155**	SMS	--	--	✓	✓	--	✓	--	
Twilio	**n/a**	SMS	--	--	--	--	--	--	--	X

*the cost detailed here is the estimated fully-loaded cost to get all identified features, not just the base model. Monthly fee, but can order for just a month.

SMS Polling

SMS polling involves participants responding to a question via a text message. The question can either be posed during a meeting in which the question along with the instructions for responding are posted on a screen or board; or be pushed out as a text to participants' phone numbers. SMS polling is an appealing option since most people own a mobile. FEWSNET could utilize the SMS polling function both during conference sessions to encourage audience participation and post-conference to gain attendees' feedback. Figure 2 details the setup requirements and costs associated with each type of utilization.

Table 2: Requirements for SMS Polling

Type	FEWS SETUP	Participant Reqs.	Cost to FEWS	Cost to Participant
During event polling	• Create the actual polling questions	• Mobile phone • Int'l calling plan or local SIM card	• Polling software	• Cost of Int'l text • Potentially cost of local SIM card
Post-event polling	• Create the actual polling questions • Collect phone numbers prior to event	• Mobile phone • Int'l calling plan or local SIM card	• Polling software	• Cost of Int'l text • Potentially cost of local SIM card

Challenges

Research has identified a number of challenges related to implementing SMS conference polling features, several of which cannot be known until the meeting is underway. Most deal with practical issues around the international reach of the SMS polling tools and the cost of the text. The FEWSNET global conference will be held in Cape Town, South Africa. However, most of the polling software we reviewed are US-based and only accept text responses from the United States and Canada.

A few online polling software sites do allow people to text responses to an international number. However, there are still some issues with this method:

- Most of the conference polling software we researched uses dedicated short codes. For example, on the TV show American Idol viewers vote for the best singer by texting 'VOTE' to a four-digit short code assigned to each contestant. However, these short codes won't work from another country because cellular networks and carriers in other countries do not recognize the codes. For international use, one needs to dial an international phone number, eliminating some of the simplicity and increasing the chance for error.

- We called the two companies we found that indicated international capabilities. However, when we described the use case, neither could guarantee that the international number would work with every type of phone and phone plan. Given that people are coming to SA with all types of phones, carriers, and phone plans, some conference attendees may be unable to participate in the polling activities.

- Currently there is no 'toll free' number to text which means the user will be charged for the text. The amount will vary based on a number of variables including the type of phone and calling plan.

To help better understand these issues, see Table 3.

Table 3: Challenges to International SMS Polling

Participant Type of Phone/Service	Work in South Africa?	Cost to User
Not internet enabled, pay as you go plan (the "dumb" phone)	• This phone would likely not work in SA unless the user swapped out the SIM card.	• Price of South African SIM card • Price of Int'l text
Not internet enabled, international calling plan	• This phone may or may not work in SA depending on the carrier and type of calling plan.	• Price would be dependent on user calling plan
Internet-enabled smart phone, any type of plan	• This phone may or may not work in SA depending on the carrier and type of calling plan. • However, if web-enabled **AND IF** the conference center has WI-FI access, this user could enter a response online.	• If using SMS, price would be dependent on user calling plan • If using web, price of wireless access (unless free in conference site).

Pilot Test Results

To examine these issues more closely, we conducted a pilot test of the process. We created a simple poll in Poll Everywhere (the most viable tool we reviewed). We set the poll coverage area as "Asia, Africa, Middle East."[2] When we created the poll, we received the following image with instructions indicating how to respond:

[2] Poll Everywhere claims full coverage in SA with people using MTN, Cell C, and Virgin Mobile. They do not claim coverage with those using Vodacom

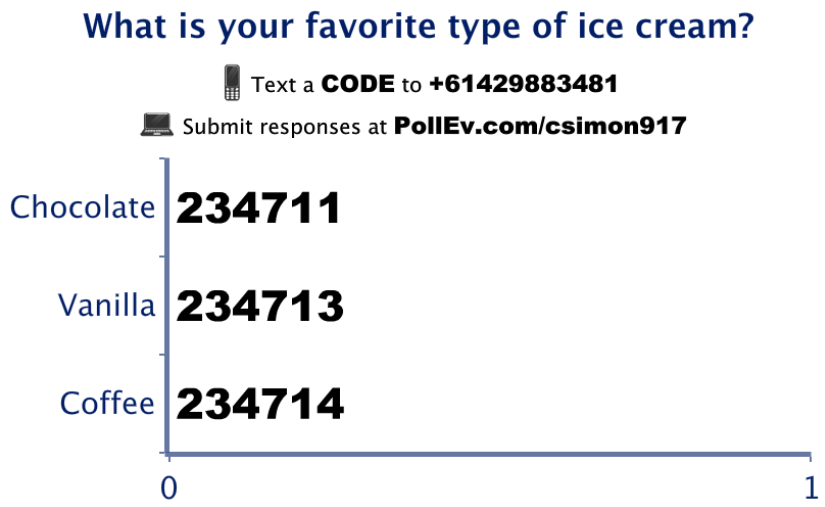


Figure 1. Example Poll

We then asked one of our employees living in South Africa (and his children) to respond to the text and to provide (via email) the following information:

- Type of phone - **Blackberry**
- Carrier – **Vodacom**
- Cost of text to answer poll - **1.75 ZAR or $.21 per SMS**

We confirmed that these texts went through. In addition, our local contact informed us that all texts using SA SIM cards should work the same way, regardless of the phone. While the test will not tell us how the system will work with participants coming from abroad with international phone calling plans sourced in their respective countries, it does validate that the system will work with local SIM cards.

Options

It is not possible to fully test for and mitigate the challenges related to the international reach of the SMS polling tools (e.g. long international dial codes, risks that texts from those with international phone plans do not go through, or text fees too costly for such plan-holders to willingly participate). However, FEWSNET could encourage participation by funding SIM cards and purchasing minutes. From our pilot test, we have the following price points:

- Cost of a SIM card: 1 ZAR ($0.12)[3]
- Cost of a Int'l text: 1.75 ZAR ($0.21)
- Cost of phone card: 15 ZAR ($1.92) -- 8 int'l texts per card
- Est. # of participants: 85

If every participant has a phone with an adjustable SIM, the total cost for capturing eight text responses per person would be USD 240. This total includes the cost of the polling software (see **Error! Reference source not found.**).

[3] Note: Vodocom has agreed to provide the SIM cards for free if we buy the minutes.

Table 4: Cost of FEWSNET Subsidization of Texting

Item	Units	Cost per unit (ZAR)	Cost in ZAR	Dollar/ZAR Exchange Rate	Est. Dollar Amount
SIM cards	85	1	85	0.128205	10.90
Phone cards	85	15	1,275	0.128205	163.36
Polling Tool	-	-	-	-	65.00
Total	**-**	**-**	**1,360**	**-**	**$239.36**

Online Polling Options

Several of the polling tools we reviewed have an online voting feature which directs participants to a URL where they can enter their vote. Such a feature could be employed either in addition to or instead of SMS polling. If the conference site has a free WI-FI connection, participants with a web-enabled phone could use their phone browsers to vote, eliminating the cost of a possibly expensive international texting plan.

This feature also opens the possibility for conference attendees to vote using their laptops. Again, assuming a free Wi-FI connection, this could minimize costs to the attendees. However, FEWSNET leaders have raised a concern about participants being on their laptops during meetings. There is a fear that participants will be distracted if the internet is enabled during the sessions.

Table 5: Requirements for Online Polling

Type	FEWS Setup	Participant Requirements	Cost to FEWS	Cost to Participant
During event polling	• Creating the poll • Wi-FI in conference room	• Participants need a laptop or smart phone	• Cost of polling software ($65) • FEWSNET not keen of people working on laptops during presentations	• Potentially the cost of a Wi-Fi (??)
Post-event polling	• Creating the poll • Collect email list of participants	• Computer or access to a computer and access to the internet	• If only using for post-event, questions can use free software like Zoomerang or Survey Monkey	• Potentially the cost of a Wi-Fi (??)

Challenges

If we limit the technology to online polling we eliminate many of the unknown costs to participants but there are other drawbacks. For instance, participation is limited to those who have either a web-enabled mobile phone or a laptop. Moreover, if we want to use this technology during presentations, the conference center would need to have wireless access, and to eliminate the cost to the user, the WI-FI would need to be free. Finally, FEWSNET planners have raised a concern about participants using laptops during presentations.

Recommendations

While there are certainly some challenges in implementing an SMS/online polling tool in an international setting, we feel it can be done successfully. From testing the feature that displays poll results real-time through the presenters' PowerPoint presentations, we also feel that using SMS polling tools will effectively engage audiences in conference sessions and will be a memorable addition to this year's conference. To implement these tools, we propose the following process.

Prior to the conference:

- Kimetrica to purchase SIM cards and Calling Cards
- Kimetrica to organize with presenters on the polls they would like to include
- Kimetrica will create all polls in advance

At the conference:

- Kimetrica to provide photocopy of directions on polling to be included in welcome package
- Kimetrica will hand out SIM cards and phone cards
- Q: How to hand out the SIM cards/phone cards? Do so at the entry of the first plenary session Monday morning?
- Kimetrica to help presenters insert poll into power-point presentations. It should not take more than two minutes to explain how this feature operates. The only issue is to make sure we test the poll on the computer being used to present, as sometimes computer settings get in the way.

Annex

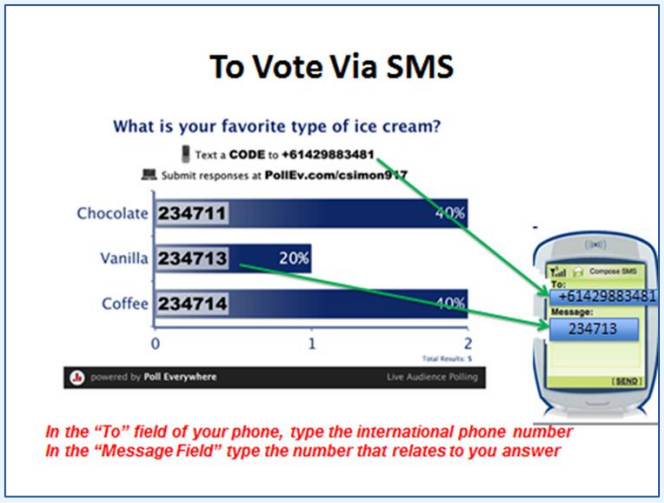
This annex contains the proposed infosheet to be included in the participant welcome package:

Poll Everywhere

At this year's FEWSNET Global Conference, we will be using an exciting new tool to spice up our presentations: Poll Everywhere, an SMS polling tool.

During some sessions, presenters will be asking for your input. You will be able to respond either by sending an SMS from your mobile or by using your laptop or smart phone's web browser to vote online. We will all be able to watch as votes are tallied and displayed in real-time. The following screenshots and text will walk you through how to cast your votes.

To encourage your participation, we are offering one free SIM card and one free phone card that will allow you to send eight international texts. If you will need these items in order to vote, please pick them up when entering the first plenary session



To solicit feedback, presenters will show a screen resembling that to the left. The question will be displayed at the top, with instructions for responding beneath. To respond via SMS text message, type the international phone number into the 'to' field of your text message. In this case, you would type '+61429883481.' Then, in the message field of your text, type in the code that corresponds to the choice you wish to vote for. In this case, if you wanted to vote for vanilla as your favorite type of ice cream, you would enter '234713.'

To vote via your laptop or phone's web browser, navigate to the url listed in the screen's instructions. In this case (see right), you would navigate to 'pollev.com/csimon917.' To vote, simply click on your answer. As all participants vote, you will be able to watch the blue bars depicted in these images grow and shrink according to the proportions of votes each has earned.

If you have any questions regarding this process, please contact Claire Simon.